(12) UK Patent Application (19) GB (11) 2 364 993 (13) A

(43) Date of A Publication 13.02.2002

(21) Application No 0017965.5

(22) Date of Filing 22.07.2000

(71) Applicant(s)
Michael Williamson
90 Miller Street, ASHTON-UNDER-LYNE, Lancashire, OL6 8PP, United Kingdom

(72) Inventor(s)
Michael Williamson

(74) Agent and/or Address for Service
Michael Williamson
90 Miller Street, ASHTON-UNDER-LYNE, Lancashire, OL6 8PP, United Kingdom

(51) INT CL^7
G01F 11/18 // A47J 31/40

(52) UK CL (Edition T)
B8N NP N6B1B2A N6B2

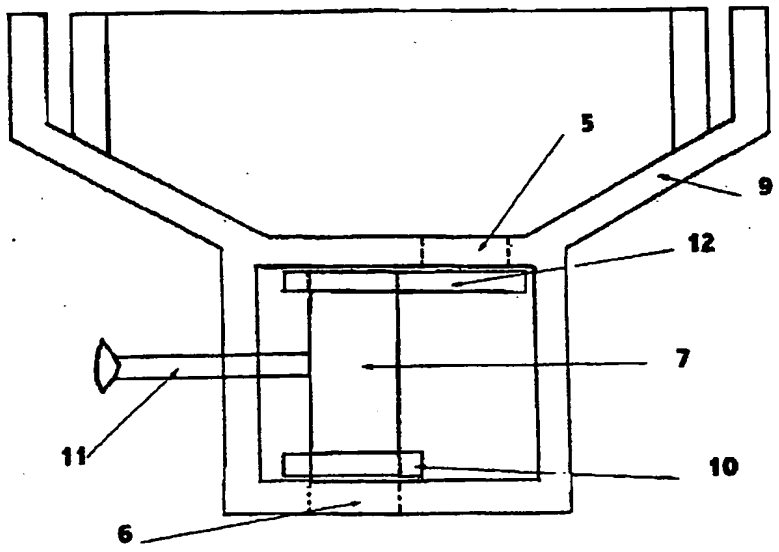
(56) Documents Cited
GB 2150117 A
GB 0999037 A
GB 0594472 A
EP 0270010 A2
US 3973704 A
GB 1046136 A
GB 0736834 A
GB 0378537 A
EP 0079239 A2

(58) Field of Search
UK CL (Edition R) B8N NP
INT CL^7 A47J 31/40 , G01F 11/00 11/18
Online: EPODOC, PAJ, WPI

(54) Abstract Title
A dispenser giving an accurate measure of powdered baby milk

(57) A dispenser particularly suited to dispensing accurate doses of powdered baby milk comprises a hopper 9 and a measuring cylinder 7 which can slide between a first position in which it communicates with the hopper 9 and receives powder therefrom, to a second position in which is communicates with a dispensing outlet 6. The measuring cylinder 7 may have a plate 12 at its upper region which acts to close the exit 5 from the hopper 9 when the measuring cylinder 7 is in the second position, and helps to prevent condensation contacting the powder. The measuring cylinder 7 is slid horizontally between the two positions by means of a handle 11. Preferably, several measuring cylinders 7 of different volumes are provided and may be interchangeable. The volume of each measuring cylinder 7 may be embossed on the side to help the visually impaired. The dispenser can preferably withstand sterilising techniques, and is adapted to be freestanding or wall mounted.

FIGURE 2



GB 2 364 993 A

FIGURE 1

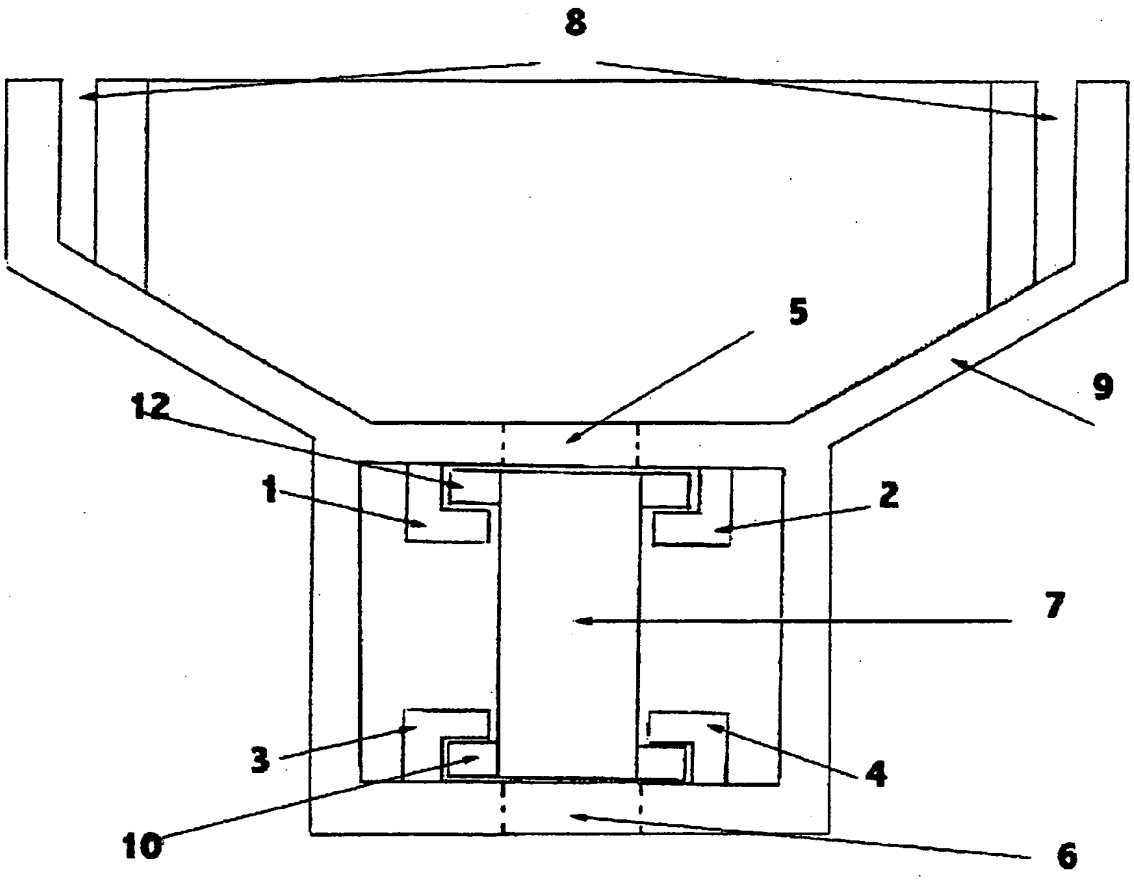


FIGURE 2

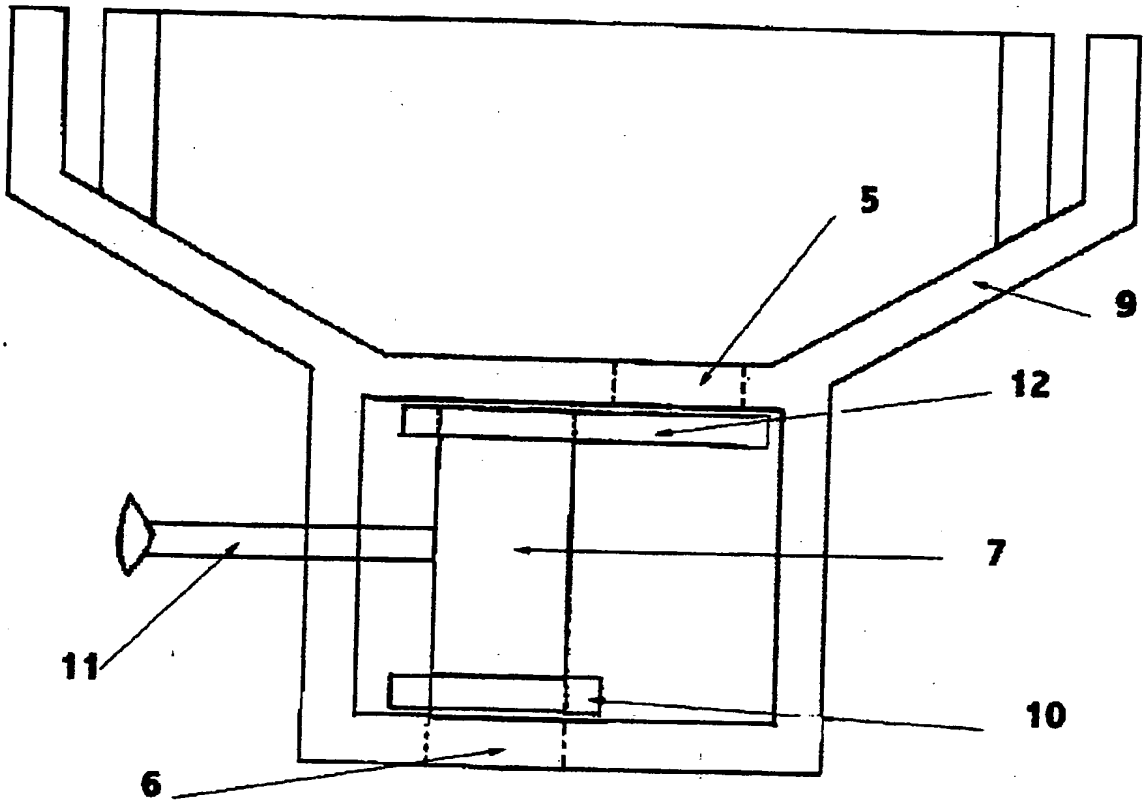
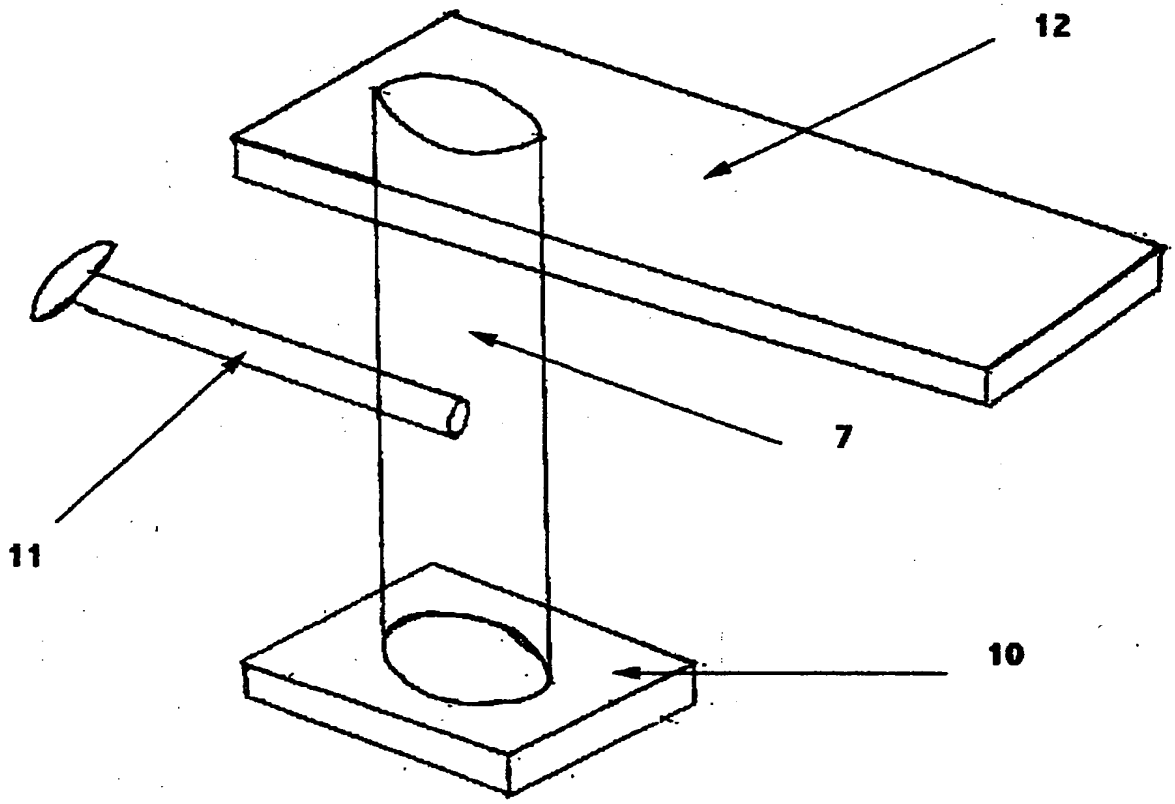


FIGURE 3



2364993

Baby Formula Milk Dispenser

The invention relates to a device that will enable a parent or other caregiver to dispense accurate measures of soluble baby formula in a quick efficient and hygienic manner.

Currently the preparation of a baby's feed involves the use of a scoop provided by the manufacturer. The preparer fills the scoop by hand with powdered formula and levels it off with a straight edged implement, typically a knife, taking care to neither contaminate the formula, nor compact it as either of these could harm the child.

Once the scoop is measured it is tipped into the bottle containing the relevant amount of water; this is a tricky operation often resulting in some spillage. This is repeated until the bottle contains one scoop for every ounce of water, any distractions during counting-out the scoops may result in the preparer losing count and having to discard the contents of the bottle, causing wastage.

An object of this invention is to overcome all of these problems by dispensing accurately and hygienically the required amount of formula to prepare a bottle of feed in one quick easy action with no spillage. It is intended that all relevant components can undergo domestic sterilisation techniques as used for other baby feeding equipment.

Accordingly, this invention provides a dispenser, which can be either free standing or wall, mounted. This will house a standard tin of formula and dispense from it a complete measure of formula dependant upon the volume of bottle required.

The unit will be made from a combination of clear and coloured plastics. All of, which can withstand sterilising by the same method as used for the baby's feeding bottles.

The measuring cylinder prevents any condensation, which may rise from the baby's feeding bottle from contacting with the powdered baby formula prior to it being dispensed into the baby's feeding bottle.

A specific embodiment of the invention will now be described with reference to the accompanying drawings in which: -

FIGURE 1 shows a cross sectional front view of the dispenser.

FIGURE 2 shows a cross sectional side view of the dispenser's slide and powder transfer mechanism.

FIGURE 3 shows the measuring cylinder with attached slides and operating lever.

As shown in Fig 1 the dispenser consists of a plastic hopper 9 which houses a standard tin of baby milk formula retained to the hopper via a channel section 8, a transparent measuring cylinder 7, which holds a set measure of powdered

formula. 1-4 are channel sections holding slides 10 and 12 in place. 5 indicates an exit point from the hopper into the cylinder 7, 6 shows an exit point from the cylinder 7 into the baby's bottle (not shown).

Fig 2. shows an operating lever 11 attached to measuring cylinder 9 used to manoeuvre it between entry and exit points 5 and 6.

Fig 3. shows that slide 12 is larger in length than slide 10, this allows exit point 5 to be sealed when the cylinder 7 is positioned over exit point 6, as illustrated in Fig2.

A baby's feeding bottle (not shown) is placed under exit point 6, lever 11 is then pushed forward which moves the cylinder 7 aligning it with exit point 5. Powdered formula then gravity feeds from the hopper into the cylinder 7 until it is full, consistently giving an accurate measure according to the cylinder's capacity. It is intended that interchangeable cylinders will be provided to permit variable volumes to be dispensed according to individual requirements.

Once full lever 11 in pulled backwards which moves cylinder 7 aligning with exit point 6. Powdered formula then gravity feeds from the cylinder 7 into feeding bottle (not shown) until empty.

Claims

1. A dispenser giving a single accurate measure of powdered baby formula.

2. A dispenser as claimed in claim 1 which has interchangeable measuring cylinders to offer the operator different volume combinations of powdered baby formula, these will also have the measure size embossed into the plastic to aid the visually impaired.

3. A dispenser as claimed in claim 1 or claim 2, which prevents condensation contacting the powdered formula prior to it reaching the baby's feeding bottle.

4. A dispenser as claimed in claims 1 to 3, which can withstand standard baby sterilisation techniques.

5. A dispenser as claimed in claims 1-4 which can be wall mounted or free standing.

The Patent Office

4

INVESTOR IN PEOPLE

Application No: GB 0017965.5
Claims searched: 1-5

Examiner: Emma Tonner
Date of search: 9 November 2000

Patents Act 1977
Search Report under Section 17

Databases searched:

UK Patent Office collections, including GB, EP, WO & US patent specifications, in:

UK Cl (Ed.R): B8N (NP)

Int Cl (Ed.7): A47J 31/40: G01F 11/00, 11/18

Other: Online: EPODOC, PAJ, WPI

Documents considered to be relevant:

Category	Identity of document and relevant passage		Relevant to claims
X	GB 2 150 117 A	(MELICONI)	1
X	GB 1 046 136	(DOUGLAS)	1
X	GB 999 037	(AITKEN)	1
X	GB 736 834	(EVANS)	1
X	GB 594 472	(CARTNER & SHERWOOD)	1
X	GB 378 537	(SHIPP)	1
X	EP 0270 010 A2	(MONNICH & CO)	1
X	EP 0 079 239 A2	(SOLOMAN)	1
X	US 3 973 704	(HOROWITZ)	1

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.